Guidelines

Wounds UK lipoedema guideline

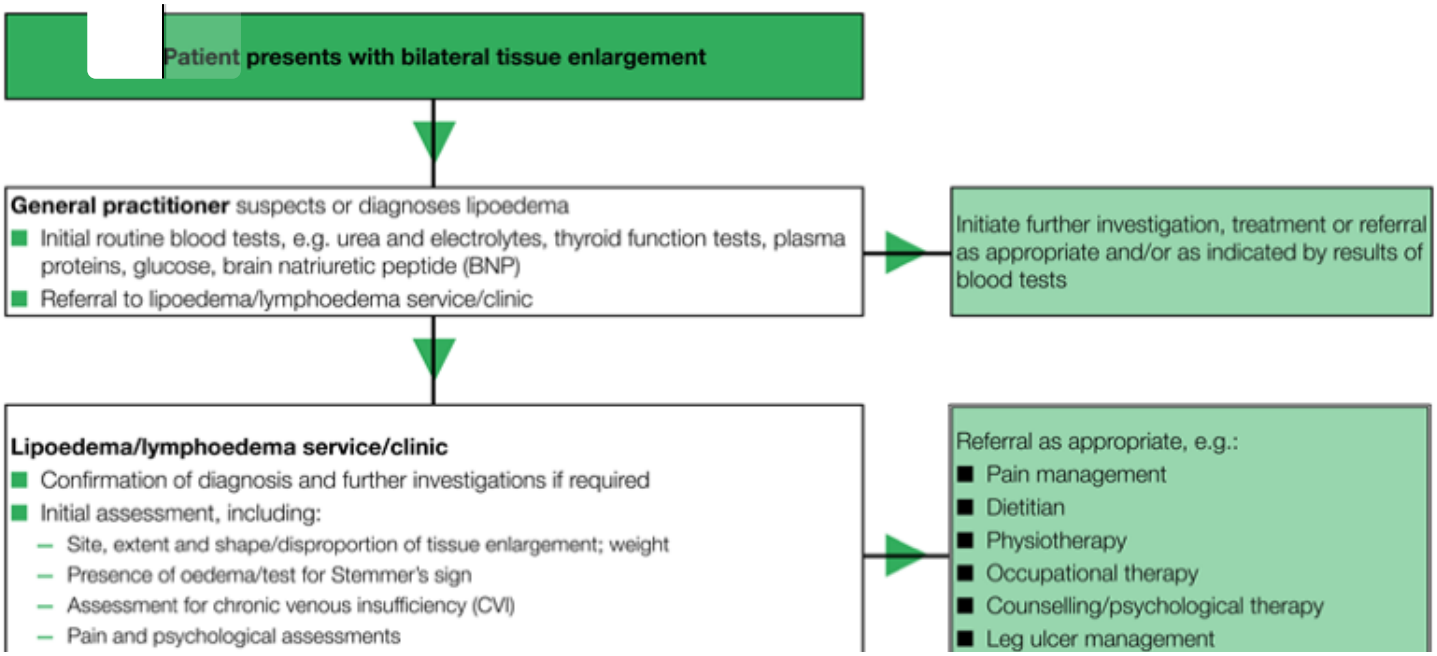
By Wounds UK | 11 September 2017

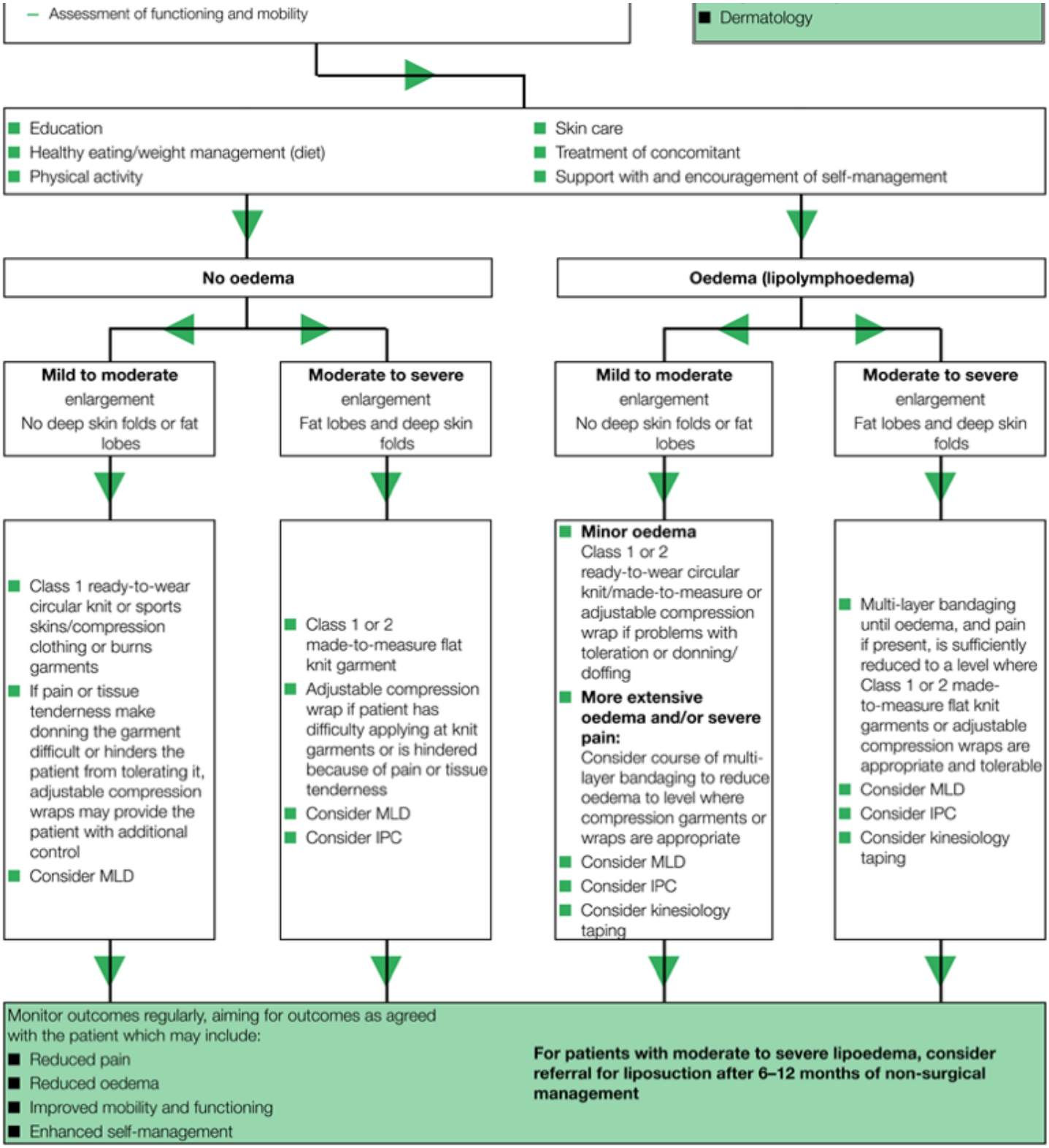
The management of lipoedema

Epidemiology and pathophysiology of lipoedema

- Lipoedema is underdiagnosed and almost exclusively affects women
- Although lipoedema is often misdiagnosed as simply being obesity, lipoedema and obesity can co-exist
- Hormonal and genetic factors are likely to contribute to the adipose tissue enlargement characteristic of lipoedema
- Patients with lipoedema may develop secondary lymphoedema (lipolymphoedema), which may be compounded if chronic venous insufficient is also present

Patient pathway*





* This algorithm is a guide—the compression and treatment regimen for a particular patient should be individualised to take account of all of their needs
IPC=intermittent pneumatic compression; MLD=manual lymphatic drainage.

Diagnosis and assessment

- Lipoedema is often not recognised in primary care, and awareness and understanding of the condition among medical professionals is limited

- Part of the reason that lipoedema may be underdiagnosed is that it may be mistaken for other conditions that cause sub-cutaneous tissue enlargement/swelling or fat deposition. The two most frequent misdiagnoses are generalised obesity (particularly in young, otherwise well patients) and lymphoedema

Characteristic signs of lipoedema that may be found during clinical examination

Subcutaneous tissue enlargement

- Usually bilateral and symmetrical without involvement of the hands and feet (at least initially)
- However, the pattern of areas affected and overall shape may vary between patients

Cuffing or braceleting at the ankles/wrists

- The tissue enlargement stops abruptly at the ankles or wrists so that there is a 'step' before the feet or hands which are usually unaffected
- May also be called 'inverse shouldering'

Loss of the concave spaces either side of the Achilles tendon

- Occurs in lower limb lipoedema
- The concave areas posterior to the malleoli (retromalleolar sulci) and either side of the Achilles tendon are filled in

Bruising

- Bruising may occur anywhere in areas affected by lipoedema, often with no known cause

Altered skin appearance, temperature and texture

- The skin of affected areas may feel softer and cooler than unaffected areas
- The skin may have the texture of orange peel or have larger dimples

Abnormal gait and limited mobility

- May be due to bulk of the legs and/or fat pads on the medial aspect of the knees
- May include:
    - reduced or poor heel to toe strike during walking
    - flat feet
    - genu valgum (knock knees)
- Muscle weakness

Stemmer's sign† negative

- Usually negative
- A positive Stemmer sign represents failure to pinch a fold of skin at the base of the second toe, and is pathognomonic of lymphoedema

Pitting oedema‡ in patients with lipoedema and secondary lympoedema (lipolymphoedema) and/or chronic venous insufficiency

- Usually absent in the early stages of the disease
- Patients with lipoedema may find testing for pitting oedema particularly uncomfortable
- Pitting indicates the presence of excess interstitial fluid and may be present in patients with lipolymphoedema and chronic venous insufficiency

† Stemmer's sign is negative or not present when a fold of skin can be pinched and lifted up at the base of the second toe or at the base of the middle finger. A positive sign (a) in a patient with lipoedema, when a fold of skin cannot be lifted, indicates secondary lymphoedema. Stemmer's sign is usually negative (b) in patients with 'pure' lipoedema.
‡ Pitting oedema is a sign of excess interstitial fluid. It can be detected by applying a thumb or finger to tissues with pressure that is sustained for at least 10 seconds. Oedema is present when a dimple or pit remains in the tissues when the pressure is removed. The depth of the pit produced may indicate the severity of the oedema. Repetition of the test across the area suspected of involvement can help to determine the extent of the oedema. N.B. Elucidation of this sign may cause

discomfort or pain and should be performed gently.

Key points

- The diagnosis of lipoedema is made on clinical grounds: there are no diagnostic tests for the condition
- Lipoedema is a condition that is distinct from lymphoedema
- Lipoedema may have a significant impact on a patient's physical and mental health and wellbeing
- Patients with lipoedema generally report a history of bilateral symmetrical limb enlargement, with sparing of the hands and feet, which is not responsive to dieting. They may also report pain, sensitivity to touch and easy bruising, and a family history of similar tissue enlargement and shape disproportion
- Affected areas of the body may be softer and cooler, with a texture that is dimpled or resembles a mattress
- The presence of pitting oedema in affected areas may indicate lipolymphoedema or chronic venous insufficiency (CVI)
- Routine blood tests may be useful to exclude or identify other conditions
- Imaging investigations are not used routinely
- Further work is required to develop a classification/staging system for lipoedema that takes into account disease progression along with symptoms such as pain or restrictions to mobility
- Holistic assessment should include the degree and extent of adipose tissue enlargement, presence and level of pain, mobility and gait, psychosocial assessment, dietary assessment, skin assessment, vascular assessment and assessment of any comorbidities
- Psychosocial assessment is particularly important in people with lipoedema because of the long-term nature of the disease and the importance of self-management

Principles of management

- A multidisciplinary approach to the management of lipoedema is necessary

- Management aims to manage symptoms, to facilitate and enhance the patient's ability to self-care and optimise health and to prevent disease progression
- The main components of lipoedema management are: psychosocial support and education, healthy eating, weight management, physical activity, skin care, compression therapy and management of pain

Psychosocial support and self-care

- In common with other chronic conditions, psychosocial support underpins the management of lipoedema and is important in encouraging self-management and realistic expectations
- Clinicians need to identify and help patients to deal with potential barriers to self-care
- Mental health issues may affect carers as well as patients with lipoedema

Healthy eating and weight management

- Although attempts to lose weight may not have an impact on enlarged adipose tissue, preventing or reducing obesity in other parts of the body through healthy eating and physical activity will help to prevent deterioration in general health
- There is no clinical evidence supporting the use of a particular diet. Patients should be encouraged to find a healthy, balanced diet that suits their needs and lifestyle
- Patients with lipoedema should be encouraged to be physically active and undertake activities that suit their needs and lifestyle, while taking into account that some patients may have individual limitations
- Skin folds may be prone to fungal infections and should be washed and dried with care
- Patients with lipolymphoedema are at increased risk of cellulitis

Compression therapy

- Compression therapy is used in lipoedema to reduce pain and support tissues. In lipolymphoedema it is also used to reduce swelling due to oedema
- Compression therapy does not reverse adipose tissue enlargement

- Patients being considered for compression therapy should undergo arterial assessment to exclude peripheral arterial disease
- Choice of compression therapy depends on a wide range of factors, including individual choice and ability to manage
- The main type of compression therapy used in lipoedema is compression garments
- Most ready-to-wear garments are circular knit, which produces a thinner fabric that may be more prone to cutting into tissues
- Most custom-made garments are flat knit, which produces a thicker more rigid fabric. These garments may be more suitable if there is considerable limb distortion
- Adjustable compression wraps may be useful for patients who find applying garments difficult or painful, and can be used alongside compression garments applied to other body areas
- Multi-layer bandaging may be useful in patients with lipolymphoedema as an initial step to reduce oedema and/or pain to a level where garments become manageable
- Measurement and fitting of compression garments should be undertaken by appropriately trained and competent clinicians
- Garments generally need to be replaced every 6 months
- IPC may be used as an adjunct to compression therapy in patients with lipolymphoedema and those with CVI

Other non-surgical approaches

- Manual lymphatic drainage (MLD) stimulates the activity of the lymphatic system and may be used in conjunction with compression therapy to reduce oedema and control symptoms such as pain in lipolymphoedema
- Some patients with pure lipoedema find MLD helps to reduce pain and discomfort
- Kinesiology taping may help to improve blood and lymph circulation and to stabilise and realign tissues and joints

Surgical management

- There is no evidence that liposuction cures lipoedema, but it may reduce pain and limb bulk, improving function and mobility
- Patients should be advised to try at least 6–12 months' non-surgical treatment before undergoing liposuction
- Pre-operative counselling is important to ensure patients understand the non-curative nature of liposuction, the long often painful post-operative course, and the need for ongoing wear of compression therapy
- Bariatric surgery may be indicated for some patients with lipoedema who are also obese

Further information and resources

- Lipoedema UK and the Royal College of General Practitioners (RCGP) have partnered to develop an online course called *Lipoedema—An Adipose Tissue Disorder*. The Royal College of Nursing (RCN) has endorsed the course, which takes about 30 minutes to complete and can be accessed at: www.elearning.rcgp.org.uk/lipoedema
- Lipoedema UK
  www.lipoedema.co.uk
  email: info@lipoedema.co.uk
- British Lymphology Society (BLS)
  www.thebls.com
- Lymphoedema Support Network
  www.lymphoedema.org

full guideline available from...

www.wounds-uk.com/best-practice-statements/best-practice-guidelines-the-management-of-lipoedema

Wounds UK. *Best Practice Guidelines: The Management of Lipoedema*. London: Wounds UK, 2017.

First included: September 2017.